

## SEQUENCE LISTING

<110> William Gaarde  
Susan M. Freier  
Andrew T. Watt

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**PATENT**

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gag gaa gtg gcc atg ggt gac gga gcc ccg gag ctc aat ggg gga cca      153
Glu Glu Val Ala Met Gly Asp Gly Ala Pro Glu Leu Asn Gly Gly Pro
          20           25           30

gaa cac acg ctt cct tcc agc agc tgt gca gac ctc tcc cag aat tcc      201
Glu His Thr Leu Pro Ser Ser Ser Cys Ala Asp Leu Ser Gln Asn Ser
          35           40           45

tcc cct tcc tcc ctg ctg gac cag ctg cag atg ggc tgt gat ggg gcc      249
Ser Pro Ser Ser Leu Leu Asp Gln Leu Gln Met Gly Cys Asp Gly Ala
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tca ggc ggc agc ctc aac atg gaa tgt cgg gtg tgc ggg gac aag gcc      297
Ser Gly Gly Ser Leu Asn Met Glu Cys Arg Val Cys Gly Asp Lys Ala
          65           70           75           80

tcg ggc ttc cac tac ggg gtc cac gcg tgc gag ggg tgc aag ggc ttc      345
Ser Gly Phe His Tyr Gly Val His Ala Cys Glu Gly Cys Lys Gly Phe
          85           90           95

ttc cgc cgg aca atc cgc atg aag ctc gag tat gag aag tgc gat cgg      393
Phe Arg Arg Thr Ile Arg Met Lys Leu Glu Tyr Glu Lys Cys Asp Arg
          100           105           110

atc tgc aag atc cag aag aag aac cgc aac aag tgt cag tac tgc cgc      441
Ile Cys Lys Ile Gln Lys Lys Asn Arg Asn Lys Cys Gln Tyr Cys Arg
          115           120           125

ttc cag aag tgc ctg gca ctc ggc atg tcg cac aac gct atc cgc ttt      489
Phe Gln Lys Cys Leu Ala Leu Gly Met Ser His Asn Ala Ile Arg Phe

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Phe Ser Lys His Ile Tyr Asn Ala Tyr Leu Lys Asn Phe Asn Met Thr			
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Lys Lys Lys Ala Arg Ser Ile Leu Thr Gly Lys Ser Ser His Asn Ala			
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Arg Glu Leu Thr Glu Phe Ala Lys Asn Ile Pro Asn Phe Ser Ser Leu			
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305	320
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Lys Pro Phe Ser Asp Ile Ile Glu Pro Lys Phe Glu Phe Ala Val Lys	
325	335
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Phe Asn Ala Leu Glu Leu Asp Asp Ser Asp Leu Ala Leu Phe Ile Ala	
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gcc atc att ctg tgt gga gac cgg cca ggc ctc atg aat gtg ccc cag	1161
Ala Ile Ile Leu Cys Gly Asp Arg Pro Gly Leu Met Asn Val Pro Gln	
355	365
gta gaa gcc atc cag gac acc att ctg cgg gct cta gaa ttc cat ctg	1209
Val Glu Ala Ile Gln Asp Thr Ile Leu Arg Ala Leu Glu Phe His Leu	
370	380
cag gtc aac cac cct gac agc cag tac ctc ttc ccc aag ctg ctg cag	1257
Gln Val Asn His Pro Asp Ser Gln Tyr Leu Phe Pro Lys Leu Leu Gln	
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Lys Met Ala Asp Leu Arg Gln Leu Val Thr Glu His Ala Gln Met Met	
405	415
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Gln Trp Leu Lys Lys Thr Glu Ser Glu Thr Leu Leu His Pro Leu Leu	
420	430
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Gln Glu Ile Tyr Lys Asp Met Tyr	
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Glu His Thr Leu Pro Ser Ser Ser Cys Ala Asp Leu Ser Gln Asn Ser				
35 40 45				
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Ser Pro Ser Ser Leu Leu Asp Gln Leu Gln Met Gly Cys Asp Gly Ala				
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Ser Gly Gly Ser Leu Asn Met Glu Cys Arg Val Cys Gly Asp Lys Ala				
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Ser Gly Phe His Tyr Gly Val His Ala Cys Glu Gly Cys Lys Gly Phe				
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145 150 155 160				
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Lys Lys Lys Ala Arg Ser Ile Leu Thr Gly Lys Ser Ser His Asn Ala	
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Pro Phe Val Ile His Asp Ile Glu Thr Leu Trp Gln Ala Glu Lys Gly	
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 385 390 395 400

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**RTS-0189**

**-141-**

**PATENT**

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**RTS-0189**

**-142-**

**PATENT**

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**RTS-0189**

**-143-**

**PATENT**

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**RTS-0189**

**-144-**

**PATENT**

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&lt;210&gt; 199

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&lt;213&gt; H. sapiens

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&lt;400&gt; 200

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acgggctgct ggtagccaac

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&lt;210&gt; 206

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&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 206

cagtgatatc attgagccta

20

&lt;210&gt; 207

&lt;211&gt; 20

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caagctgctg cagaagatgg

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&lt;210&gt; 213

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acgcccagat gatgcagcgg

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&lt;210&gt; 214

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**RTS-0189**

**-152-**

**PATENT**

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**RTS-0189**

**-153-**

**PATENT**

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caggccaatg ttgctgatgg

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&lt;210&gt; 224

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&lt;213&gt; H. sapiens

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ggccaatggt gctgatggcc

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&lt;210&gt; 225

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**RTS-0189**

**-155-**

**PATENT**

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